December 8, 1998

COMMISSION VOTING RECORD

DECISION ITEM: SECY-98-239

TITLE: POST-DISPOSAL CRITICALITY RESEARCH

The Commission (with all Commissioners agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of December 8, 1998.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commissioners, and the SRM of December 8, 1998.

John C. Hoyle Secretary of the Commission

Attachments: 1. Voting Summary

2. Commissioner Vote Sheets

3. Final SRM

cc: Chairman Jackson

Commissioner Dicus Commissioner Diaz

Commissioner McGaffigan Commissioner Merrifield

OGC

EDO

PDR

DCS

VOTING SUMMARY - SECY-98-239

RECORDED VOTES

	APRVD	DISAPRVD	ABSTAIN	NOT PARTICIP	COMMENTS	DATE
CHRM. JACKSON	Χ				X	11/4/98
COMR. DICUS	Х				X	11/16/98
COMR. DIAZ	Х				X	10/21/98
COMR. McGAFFIGAN	Х				X	11/13/98
COMR. MERRIFIELD	X					11/12/98

COMMENT RESOLUTION

In their vote sheets, all Commissioners approved the staff's recommendation and some provided additional comments. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on December 8, 1998.

Chairman Jackson's Comments for SECY PAPER 98-239

After reviewing the evaluations of post-disposal criticality at three disposal sites, the conservative assumptions employed by the staff and its contractors, and the Advisory Committee on Nuclear Waste recommendation that significant research on post-disposal criticality is unnecessary, I approve the staff recommendation to cease further post-disposal criticality research at low-level waste disposal facilities.

Additionally, as directed in the SRM on SECY-98-010, I continue to recommend that the staff continue the development of the guidance on emplacement criticality, and I approve the staff recommendation to address the disposal of unusual moderators as part of this guidance.

Commissioner Dicus' comments on SECY-98-239

I reluctantly approve staff's recommendation to halt further post-disposal criticality research at low-level radioactive waste facilities (Option 1) at this time. Although I continue to believe that additional research in this area would be beneficial, I recognize that the Commission is faced with making some tough decisions in light of the budget constraints facing this agency today. At a time of intense competition for resources, particularly in the Office of Research, I believe that additional research on post-disposal criticality should be delayed to accommodate higher priority work. I commend the staff for its work to date in this area.

Commissioner Diaz's comments on SECY-98-239

I fully agree with the staff's recommendation of option 1. No additional work is necessary in this area.

Commissioner McGaffigan's Comments on SECY-98-239:

I approve the staff's recommendation (Option 1) to cease further review of post-disposal criticality and fully agree with the comments of Chairman Jackson and Commissioner Diaz.

In approving Option 1, I carefully considered the Differing Professional View (DPV) attached to the paper; however, in my view, it does not make a persuasive case for Option 2. At the Envirocare site, the contractor's study found that the probability of criticality is "vanishingly small." At the Parks Township site, the staff's analysis indicates that the potential for criticality was so unlikely that it need not be considered further and the draft contractor's analysis attached to the DPV quantifies this extremely remote risk. Finally, at the Barnwell site, while one trench warranted further evaluation by the contractor and staff, I see no value in demonstrating yet another extremely small risk value when quantifying criticality at a low-level waste (LLW) disposal site. That said, I do not believe that a Commission decision to cease further research on post disposal criticality will send a negative message to the LLW community. On the contrary, without any further research, it is my belief that the staff has adequate information on which to base highly conservative emplacement criteria and disposal guidance for LLW sites consistent with current industry practice which has long ensured that criticality is prevented. In her vote, the Chairman has reiterated previous Commission direction to the staff to develop disposal guidance and emplacement criteria for LLW sites, and I heartily agree.